

REMARKS

Claims 6-17 are pending in the application.

It is believed that this Response is fully responsive to the Office Action dated **January 21, 2004**.

In regard to the Examiner's statement at page 4 of the Office Action that "...applicant has not responded to the examiners request for applicant to submit any publications and patents that he is aware of concerning the recited adhesive and its properties," Applicant's are fully aware of their duty of disclosure and note that an Information Disclosure Statement was filed in the present application, on August 16, 2001.

In view of the following remarks, further and favorable consideration is respectfully requested.

I. Claims 6-17 have been rejected under 35 U.S.C. §112, first paragraph, for containing New Matter.

The Examiner states that there is no support in the specification for the limitation in claims 6 and 7, that the pressure sensitive adhesive layer "consists of" a styrene butadiene-based rubber, an acryl-based rubber, and a rosin-based or petroleum resin-based material. It appears that the Examiner may be taking this position because the exact language "consisting of" does not appear in the specification.

In view of the following, this rejection is traversed.

Present claims 6 and 7, both require:

“...a pressure sensitive adhesive layer provided on said base material for attaching said hole-sealing sheet to said surface portion surrounding said vent hole, consisting of:

a styrene butadiene-based rubber;
an acryl-based rubber; and
a rosin-based or a petroleum resin-based material,...”

The recitation of “consisting of” or “consists of,” is not new matter, and the present adhesive composed of only the three claimed ingredients is sufficiently described within the meaning of 35 USC § 112, 1st paragraph, in the present specification at page 9, lines 1-5. In fact, the present specification *does not describe any other possible additional components* for inclusion in the adhesive.

MPEP 2163.05 discusses changes to the scope of claims, and recites “...To comply with the written description requirement...each claim limitation must be expressly, *implicitly*, or *inherently* supported in the originally filed disclosure...” (Emphasis added). The Federal Circuit has consistently held that *ipsis verbs* disclosure is *not necessary* to satisfy the written description requirement. Instead, the disclosure need only reasonably convey to the skilled artisan that the inventor had possession of the subject matter in question. See *In re Wilder*, 736 F.2d 1516 (Fed. Cir. 1984); *Ralston Purina Co. v. Far-Mar-Co., Inc.*, 772 F.2d 1570 (Fed. Cir. 1985); and *Fujikawa v. Wattanasin*, 93 F.3d 1559 (Fed. Cir. 1996).

Further, the court, in *In re Peters*, 723 F.2d 891 (Fed. Cir. 1983), held that where a claim is amended to eliminate a non-critical limitation, the written description is sufficient. In the present case, the recitation of “consists of” serves to eliminate non-critical elements.

The present specification, at pages 8-9, discloses that suitable adhesives “..include natural rubber, synthetic rubber”, and discloses that the presently claimed adhesive is preferred. Specifically the sentence bridging pages 8 and 9, states:

“...A pressure sensitive adhesive, which is produced by blending *styrene butadiene-based rubber* and *acryl-based rubber* with *a rosin-based or petroleum resin-based* stickiness-providing material so as to have both excellent pressure sensitive properties and excellent thermosensitive properties, *is particularly preferable* for use....” (Emphasis added).

While MPEP 2163.05 (I) discusses broadening a claim by omitting a limitation, and states that omission of a limitation can raise an issue regarding whether the inventor had possession of a broader, more generic invention, that is not relevant to the present case where claims 6 and 7 were limited to the disclosed preferred pressure sensitive adhesive by the recitation of “consists of”. This section concludes that, where a limitation is taught as being essential or critical, the exclusion of that element does not comply with § 112, 1st paragraph. In the present case, no elements, other than the claimed elements of the adhesive, are taught to be “critical” or “essential” to the adhesive.

The recitation of “consists of” serves to exclude all other additional components from a claim. Please see the specification at page 9, lines 1-5, which passage discloses a preferred adhesive that is produced by “...blending styrene...so as to have...is particularly preferable for use.” This passage does *not* imply that any other ingredients are present. Rather, it states that *three specific ingredients are blended*, not that compounds for example “containing” or “including” those ingredients, are blended.

It is noted that the terms “including” and “containing” have been held to be synonymous with “comprising” thereby permitting the inclusion of unnamed components. The fact that page 9 uses neither of these terms, nor terms similar thereto, clearly communicates to the skilled artisan that the preferred adhesive contains **only** those recited elements. In support of this interpretation, the court in *Lampi Corp. v. American Power Products, Inc.*, 228 F.2d 1365 (Fed. Cir. 2000), held that:

“...Interpreted in the light of the patent’s specification, “having” is an open transition that permits inclusion of other entities. Language in the specification referring to “two separable half-shells” were merely describing a preferred embodiment...”

In the present case regarding the adhesive, it is submitted that claims 6 and 7 are of the exact same scope and define the exact adhesive as that recited on page 9, lines 1-5, of the present specification, and that the specification clearly describes the claimed subject matter within the meaning of 35 USC § 112, 1st paragraph.

Regarding the Examiner’s contention that the claims as originally filed do not recite an adhesive layer, applicant’s note that **all** of the claims as originally filed generically recite an “adhesive hole-sealing sheet.” Claim 4 as originally filed specifically recites that the hole-sealing sheet includes an adhesive layer. Further, claim 5 which is dependent on claim 4, recites that the hole-sealing sheet includes a base material that is a white chemical sheet.

Specifically, original claims 4 and 5, are as follows:

“4. A container for packaging food of claim 2 or 3, wherein the hole-sealing sheet seals the vent hole such that the **adhesive layer** having uneven width provided in the hole-sealing sheet covers the periphery of the vent hole.

5. A container for packaging food of any of claims 2 to 4, wherein the hole-sealing sheet is made of *white chemical paper used as a base material.*" (Emphasis added).

Regarding the Examiner's contention that the specification is inconclusive as to the make-up of the adhesive constituents, it is submitted that the specification at page 9 clearly sets forth a preferred embodiment of the present adhesive, while the Examples employ the less preferred embodiments disclosed at the bottom of page 8. There is no requirement in the law that every embodiment, or any embodiment, or that the most preferred embodiment, must be exemplified.

Further, as to the Examiner's conclusion that "Thus, the adhesive, which is disclosed as working the best, is not..." one consistent with the claimed adhesive", it is noted that nowhere in the specification, is it implicitly or explicitly disclosed that the exemplified adhesive "works best" and that in fact, the specification teaches that the claimed adhesive is "preferred."

If this rejection is to be maintained the Examiner is respectfully requested to specifically address each of applicant's above points. In view of the above, it is submitted that claims 6-17 do not contain "new matter" and that claims 6-17 are fully supported by the present specification and claims as originally filed, within the meaning of 35 USC § 112, first paragraph. Thus, the Examiner is respectfully requested to withdraw this rejection.

II. Claims 6-17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Iwata et al. (Japanese 8-183570) in view of Clarke et al. (6,210,724) further in view of Airlie (UK 2,137,212) and Lee (EP 101,251).

The Examiner rejects the claims for reasons of record, and further applies Clarke as teaching a pressure sensitive adhesive that is thermo-sensitive and does not contain a foaming agent. The Examiner asserts that Iwata's adhesive has thermo-sensitive and pressure sensitive properties.

A. Clarke:

Clarke is directed to temperature responsive containers that provide for visually determining the thermal history of a sealed package, i.e., a foodstuff. See col. 1, lines 36-66.

Clarke states in col. 5, lines 13-17, and in the claims, that the temperature that the package should be vented at is ***not more than about 18 °C***, more often not more than about 10°C. Clarke goes on to recite suitable adhesives useful for such packages are those that have ***peak polymer melting points of 2 to 20 °C*** and preferably 2 to 10°C. See col. 5, lines 19-21.

Clarke discloses forming a ***temperature sensitive unit*** including an ***adhesive*** and a ***force member*** that may be heat recoverable and/or elastically deformed. **NOTE:** Clarke does ***not*** require that the adhesive be a thermo-sensitive adhesive. Rather, Clarke requires a temperature sensitive ***unit*** which can be achieved using a thermo-sensitive adhesive or by the use of a heat recoverable force member.

Specifically, the force member when attached to the package/container can be heat recoverable such that when the container is heated, the force member upon heating exerts elastic recovery forces that are sufficient to overcome the adhesive forces of the adhesive where the adhesive does or does not weaken upon heating, thereby exposing the aperture, i.e., the adhesive is a pressure sensitive adhesive.

(i) Clarke's Examples:

Elastic Deformation:

Example B1 at col. 8 corresponds to Figs. 1- 5, directed to the use of adhesives that have thermo-sensitive properties for use in a container for foodstuffs (please see the description of Figs. 1-5). Example B1 illustrates the use of the adhesive **A1 which is a siloxane/SCC** block copolymer having a **peak melting point of 6.8 °C**, and includes alkyl acrylates C12A and C14A, and polydimethylsiloxane terminated at one end only by a methacryloxypropyl group. In this Example, the adhesive A1 was coated onto a film and a sample was cut from the coated film and an aperture was cut into the sample, the sample was secured to the container using an adhesive (215) and the sample was then elastically deformed as shown in Figs. 1-6 such that it was secured to itself via adhesive A1 (214 in the Figs.). At an elevated temperature, the weakening of the adhesive 214 causes the elastic forces to exceed the adhesive forces. See col. 6, col. 7, lines 45-62, and Example B1. This Example illustrates the **loss** of adhesive properties at temperatures of **1 °C and at 5 °C**.

Heat Recoverable Force Member:

Example B2 at col. 8 corresponds to Fig. 11, where the **PSA** does *not* have thermo-sensitive properties. In this example, the adhesive is 25 parts of A3 (A3 is C14A, C16A and C18A alkyl acrylates, acrylic acid and dodecyl mercaptan) and 75 parts of styrene butadiene rubber. Here the PSA is coated onto a PET film and dried. A sample was then cut from the dried sheet, covered with a siliconized PET sheet and the structure was wrapped around a mandrel with the adhesive on the outside, and dried. The cover sheet was then removed and the curled label was secured flat over the aperture of the container. As discussed in this Example and in Fig. 11, the temperature sensitive unit includes a layer of the PSA (A3 and SBR) and a **heat-recoverable** sheet such that at the storage temperature for the container, the heat recoverable sheet is a flat sheet, but at an elevated temperature the flat sheet curls because the recovery forces of the heat-recoverable sheet exceed the adhesive forces of the PSA, thus exposing the aperture. Please see Example B2 and col. 7, lines 31-42 (describing Fig. 11).

Example B3 uses the same adhesive as Example B2 (a PSA). This example differs from example B2 **only** in that the coated sheet is dried flat, and is then secured to the container in a bent configuration, such that at an elevated temperature the recovery forces of the heat recoverable sheet exceed the adhesive forces and the heat recoverable sheet straightens, thus exposing the aperture. This Example discloses that at 0°C the film can be secured in a bent configuration, to the container.

B. Iwata, Airlie and Lee:

Iwata discloses an acryl based rubber or styrene butadiene based rubber adhesive and requires that the adhesive contain a foaming agent in order to achieve reduced adhesiveness when heated. Iwata does not teach a PSA that has thermo-sensitive properties in absence of a foaming agent.

Airlie and **Lee** disclose PSAs where the adhesive is permanent. **Airlie** and **Lee** disclose SBR, acrylic and rosin.

C. The Examiner's Position/Analysis:

(i) In the Office Action, the Examiner appears to address Applicant's arguments that the combination of Iwata with Airlie and/or Lee, is improper by asserting that the rejection is based on substituting one conventional adhesive for another, i.e., Airlie and Lee's adhesive for Iwata's adhesive. The Examiner appears to cite Clarke as disclosing the same adhesives as Airlie and Lee and teaching that these adhesives are thermo-sensitive, thereby establishing their equivalence.

In view of the above, Clarke does not teach that the adhesives of Airlie and Lee possess thermo-sensitive properties, does not establish that the adhesives of Airlie and Lee are thermo-sensitive, and does not establish that these adhesives are equivalent to the adhesives of Iwata.

Clarke exemplifies *only a single adhesive having thermo-sensitive properties*, i.e. adhesive A1 of Example B1. Please see the above discussion. Adhesive A1 is a *siloxane/SCC* block

copolymer and has a peak melting point of **6.8 °C** as can be seen from Example B1 and Table 1.

Neither Airlie nor Lee teach a siloxane/SCC block copolymer.

We note that **Clarke** states at col. 5, lines 34-38, that:

“When the package contains a foodstuff to be cooked by microwaves, the temperature at which the package should be vented is much higher, for example in the range of 60-90°C. For such use, therefore, the adhesive should melt (or soften close to that range.”

However, Clarke does not disclose or suggest ***any*** adhesive that melts in the range of 60-90°C. As can be seen from Table 1 at col. 9 of Clarke, ***all*** of the three polymers prepared (A1-A3) had a peak melting point of **36.6 °C or below**.

Accordingly, Clarke ***does not*** teach or establish that the adhesives of Airlie and/or Lee have thermo-sensitive properties, because Clarke teaches only a single polymer A1, that possess thermo-sensitive properties and A1 is a siloxane/SCC block copolymer. Regardless, Airlie and Lee both ***require*** permanent pressure sensitive adhesives.

Applicant's note that MPEP 2144.06 states “...the equivalency must be recognized in the prior art, and cannot be based on applicant's disclosure or the mere fact that the components at issue are functional or mechanical equivalents...” In the present case, the components at issue are not recognized equivalents, nor are they functional or mechanical equivalents. Please see the above discussion.

Iwata teaches an adhesive composition which includes a ***foaming agent*** which foaming agent is critical to achieving the required reduction in adhesiveness upon heating (thermo-sensitive

properties). Airlie and Lee require permanent pressure sensitive adhesives (PSAs). Airlie teaches that it is desirable to include an *anti-foaming agent* in the disclosed PSA composition. Clarke teaches *temperature sensitive units* that employ adhesive compositions that can be TSAs or PSAs. Clarke teaches a single TSA in Example B1 which is A1, a siloxane/SCC block copolymer having a peak melting temperature of -6.8°C . All of the adhesives disclosed by Clarke have a peak melting point of 36.6°C or below (see Table 1).

(ii) The Examiner takes the position that both Iwata and Clarke disclose PSAs that have thermo-sensitive properties, and that because Clarke teaches pressure sensitive adhesives that are thermo-sensitive without foaming agents, the urged teaching away of Airlie from Iwata, is moot.

In view of the above, it is submitted that Clarke does not teach or establish that the adhesives of Airlie and/or Lee possess thermo-sensitive properties. Please see the discussion of Clarke set forth above.

D. Authority regarding *Prima Facie Obviousness*:

MPEP 2143 discusses the requirements of a *prima facie* case of obviousness. First there must be some suggestion or motivation to combine the reference teachings or to modify the reference, and second there must be a reasonable expectation of success. Finally, the prior art reference or references when properly combined, must teach or suggest all the claim limitations.

MPEP 2143.01 states that there are three possible sources for a motivation to combine references: the nature of the problem being solved, the teachings of the prior art, and the knowledge

of one of ordinary skill in the art. Further, MPEP 2145 (X)(D)(2) states that “It is *improper* to combine references where the references *teach away* from their combination.” (Emphasis added)

This section quotes *In re Grasselli*, 713 F.2d 731 (Fed. Cir. 1983) which court held that a claimed catalyst which contained both iron and an alkali metal was not suggested by the combination of a reference which taught the interchangeability of antimony and alkali metal with the same beneficial result, combined with a reference expressly excluding antimony from , and adding iron to, a catalyst.

A combination of references may teach every element of a claimed invention, but without a motivation to combine the references, a rejection based on a *prima facie* case of obvious was held improper. *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1998).

Further, where the *prior art conflicts, all teachings must be considered*. The fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness. MPEP 2143.01 further states that a proposed modification *cannot* render the prior art unsatisfactory for its intended purpose. If it does, then there is no suggestion or motivation to make the proposed modification. Further, the proposed modification *cannot* change the principle operation of a reference. MPEP 2141.02 states that prior art must be considered in its entirety, including disclosures that teach away from the claims. See also MPEP 2145 (X)(D).

Regarding *teaching away* and motivation to combine, the court in *Winner International Royalty Corp. v. Wang*, 202 F.3d 1340 (Fed. Cir. 2000), held that if a prior art reference “did in fact

teach away from [a second reference], then that finding alone can defeat [an] obviousness claim” based on combination of the two references. In *Karsten Manufacturing Corp. v. Cleveland Golf Co.*, 242 F.3d 1376 (Fed. Cir. 2001), the court held that “the conflicting teachings of two prior art references can not reasonably be viewed as suggesting their combination...”

Regarding *teaching away*, MPEP 2141.02 states that prior art must be considered in its entirety, including disclosures that *teach away* from the claims. See also MPEP 2145 (X)(D).

The court in *In re Gurley*, 27 F.3d 551 (Fed. Cir. 1994) held that “A prior art reference may be said to *teach away* when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” The court in *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443 (Fed. Cir. 1986), held that “A reference should be considered as a whole, and portions arguing against or teaching away from the claimed invention must be considered.”

E. The Present Case:

Motivation to Combine:

Responsive to the Examiner’s new rejection including Clarke, it is again submitted that the combination of Iwata with Airlie and/or Lee is improper because there is no suggestion or motivation supporting the combination, because Airlie and lee *teach away* from non-permanent adhesives and

require attaining permanent adhesion while Iwata **teaches away** from permanent adhesives and *requires* attaining non-permanent adhesion. Thus, *these references teach away from each other*.
MPEP 2145 (X)(D)(2).

Further, the combination of Clarke with Iwata is improper because there is no motivation or suggestion supporting the combination. Clarke provides a container for foodstuffs that allows a visual determination of thermal history, by observing whether or not the package is vented, where the adhesives disclosed have a peak melting point of **2 to 20 °C** and lose adhesiveness at not more than **18 °C**. Clarke does not teach or suggest any adhesives that retain adhesiveness at temperatures of not less than 70°C. Iwata is directed to a food container for heating in for example, a microwave and requires an adhesive that retains adhesiveness to temperatures of not less than 70°C, where loss of adhesiveness occurs at **70 to 100 °C**.

Thus, the skilled artisan in view of Iwata requiring the retention of adhesiveness at high temperatures, would have no motivation to look to art disclosing adhesives that lose adhesive properties at temperatures of not more than 18°C (Clarke). Likewise, the skilled artisan in view of Clarke concerned with the determination of food spoilage during storage, where temperatures may become too warm, and requiring loss of adhesiveness at temperatures of not more than 18°C, would have no motivation to look to art requiring adhesives that retain adhesiveness at high temperatures (Iwata).

Further, Clarke does not provide the necessary motivation to combine Arilie and Lee with Iwata, because Clarke does not teach that the adhesives disclosed in Arilie and Lee, possess thermo-sensitive properties, let alone thermo-sensitive and adhesive properties which would render them suitable for use at the temperatures required by Iwata, let alone adhesives possessing properties which would render them suitable for use in the absence of a foaming agent.

Clarke does not teach or suggest that *any* adhesives that are thermo-sensitive and adhesive at high temperatures of from 70 to 100°C, as required by Iwata, let alone that the adhesives disclosed in Arilie and Lee are thermo-sensitive, let alone thermo-sensitive at temperatures required by Iwata. Clarke suggests at most, a siloxane/SCC block copolymer that lose adhesives at no greater than 18°C.

Further, the substitution of the combination of PSAs without a foaming agent of Arilie and/or Lee, for the TSA of Iwata would render Iwata unsatisfactory for its intended purpose and would change the principle operation of Iwata, since the PSAs of Arilie and/or Lee not including a foaming agent, would result in permanent adhesion. **MPEP 2143.01.**

The substitution of the adhesives of Clarke for the adhesives of Iwata would also render Iwata unsatisfactory for its intended purpose and would change the principle operation of Iwata, since the PSAs of Clarke would lose adhesiveness at no greater than 18°C, thereby causing premature venting of the container of Iwata which requires adhesiveness of the adhesive to temperatures of at least 70°C. **MPEP 2143.01.**

Motivation to Modify Properly Combined References:

It is submitted that even if the combination of references were proper, there is no motivation to modify Iwata to substitute the PSAs of Airlie and/or Lee, because there is no suggestion in any of the references taken alone or together, that a PSA or combination of PSAs, could be substituted for a TSA, and be expected to exhibit sufficient thermo-sensitive properties, let alone in the absence of a foaming agent, as presently required.

Further, Iwata *teaches away* from the present adhesive, because Iwata *requires* a foaming agent in order to achieve the intended purpose of the invention, i.e., venting at an elevated temperature. Airlie and/or Lee do not cure the deficiencies of Iwata, because neither of them teach or suggest TSAs or PSAs having thermo-sensitive properties in the absence of a foaming agent. In fact, Airlie and Lee both *require* achieving permanent adhesion, and teach that poor adhesives are those that do not achieve permanent adhesion. Both Airlie and Lee *teach away* from TSAs. Further, Airlie discloses that *anti-foaming* agents can be included in the adhesive composition. See claim 14 of Airlie.

Clarke does not cure the deficiencies of Iwata, Airlie and/or Lee, because Clarke does not teach or suggest PSAs that possess sufficient thermo-sensitive properties (i.e., adhesives that retain adhesiveness at high temperatures), and in fact requires adhesives that lose adhesiveness at temperatures not greater than 18°C. Further, Clarke does not teach or suggest the adhesives of Airlie

and/or Lee, or that they possess thermo-sensitive properties, let alone sufficient thermo-sensitive properties in the absence of a foaming agent.

Further, there would be no reasonable expectation of success. Iwata achieves thermo-sensitive properties using a PSA together with a foaming agent where adhesiveness is retained at high temperatures. Airlie and Lee teach achieving permanent adhesion using PSAs without a foaming agent (and in the case of Airlie, with an anti-foaming agent). Clarke teaches only PSAs that lose adhesiveness at temperatures not greater than 18°C and teaches only a single adhesive having thermo-sensitive properties, i.e., a siloxane/SCC block copolymer A1.

Thus, the skilled artisan substituting the PSAs of Airlie and/or Lee without a foaming agent, for the adhesive with a foaming agent of Iwata, would expect to achieve permanent adhesion, and would also thus destroy the function and purpose of Iwata.

None of the references, taken alone or together, teach or suggest the present adhesive combination that is limited to the recited components thus excluding a foaming agent, and which has a vertical peeling strength of not less than 1N/cm at a temperature of 40°C or lower and a vertical peeling strength of no higher than 0.1 N/cm at a temperature of 80°C or higher, as presently required.

Again, all of the adhesives taught by Clarke, fail at temperatures of not more than 18°C. Clarke does not establish that the adhesives of Airlie and Lee are thermo-sensitive. Iwata does not suggest an adhesive absent a foaming agent. Airlie and Lee do not teach temperature sensitive adhesives at all, and require permanent adhesion.

In view of the foregoing, it is submitted that a proper case of *prima facie* obviousness has not been established because the combination of references is improper, and assuming *arguendo* the combination proper, there is no motivation to modify the references to achieve the presently claimed invention, and any such modification would render the references unsatisfactory for their intended purpose and would change their principal operation.

The Present Invention:

Present claims 6 and 7 require an adhesive layer *consisting of* the claimed components (i.e., a styrene butadiene-based rubber; an acryl-based rubber; and a rosin-based or a petroleum resin-based material), where adhesiveness is *maintained at 40 °C* (i.e., vertical peeling strength of not less than 1N/cm at a temperature of 40°C or lower) and *loses adhesiveness at 80 °C* or higher (i.e., and a vertical peeling strength of no higher than 0.1 N/cm at a temperature of 80°C or higher).

Neither Iwata nor Clarke, teach or suggest the presently claimed adhesive layer. *Clarke does not disclose an adhesive having thermo-sensitive properties that includes SBR.*

Iwata does not teach or suggest an adhesive having thermo-sensitive properties, absent a foaming agent. Airlie and Lee do not teach or suggest thermo-sensitive adhesives at all, let alone an adhesive that maintains adhesiveness at 40°C and loses adhesiveness at 80°C or above. In fact, Airlie teaches the use of an anti-foaming agent.

Lastly, assuming *arguendo* motivation to modify, the skilled artisan substituting the PSAs of Airlie and/or Lee without a foaming agent, for the adhesive including a foaming agent of Iwata,

would expect to achieve permanent adhesion, and would also thereby destroy the function and purpose of Iwata.

F. Conclusion:

- Iwata *teaches away* from Airlie and Lee (permanent pressure-sensitive adhesives);
- Airlie and Lee each *teach away* from Iwata (thermo-sensitive adhesives);
- MPEP 2145 (X)(D)(2) states that “It is *improper* to combine references where the references *teach away* from their combination.”;
- Clarke *does not teach* that the adhesives of Airlie and Lee possess thermo-sensitive properties and thus does not establish their equivalence;
- Iwata *does not suggest* an adhesive *absent* a foaming agent, because Iwata teaches that the foaming agent is critical to achieving thermo-sensitivity; in view of that criticality, Iwata *teaches away* from adhesives *not including a foaming agent*, i.e., the present adhesive;
- The presently claimed invention *excludes a foaming agent* from the adhesive; and
- The presently claimed invention requires that the adhesive have a vertical peeling strength of not less than 1N/cm at a temperature of 40°C or lower and a vertical peeling strength of no higher than 0.1 N/cm at a temperature of 80°C or higher.

In view of the foregoing, it is submitted that nothing in the applied references, taken alone or together, renders the claimed invention obvious within the meaning of 35 USC § 103. Accordingly, the Examiner is respectfully requested to withdraw this rejection. Should this rejection be maintained the Examiner is respectfully requested to address each of the points raised above.

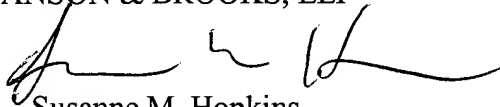
In view of the aforementioned remarks, it is submitted that claims 6-17 are in condition for immediate allowance. Early notice to that effect is earnestly solicited.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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